



Lawrence Livermore National Laboratory

HEALTH & ECOLOGICAL ASSESSMENT DIVISION

January 29, 2002

Dr. Gerald Peterson
U.S. Department of Energy
EH-6/270CC
19901 Germantown Road
Germantown, MD 20874-1290

Dear Gerry:

Please find enclosed an Operations Plan for the Spring 2002 mission to Bikini Island. This mission was anticipated in our Field Work Proposal, and falls under our obligations to perform one major field mission during FY2002. The mission will require LCU and logistical support from BN and local Marshallese field workers. We had originally planned to do some follow-up work on Rongelap, but because of budgetary constraints believe that this work should now be postponed until the spring of 2003. The workplan on Bikini will involve sampling of 3 major experiments, sampling of coconut from a series of daughter-parent trees, sampling of coconut and tree trunk cores from quad trees surrounding lysimeter 10 and 11, collection of soils samples from lysimeter 12, collection and initial processing of well and lysimeters waters, and fertilization of selected treatment areas in the HEJ demonstration plot. One of us (Terry Hamilton) will also help support scheduled urine collections on Enewetak and Majuro. Please let me know if you have any further questions.

Your sincerely,

Terry Hamilton

Personnel:

LLNL

Terry Hamilton (Bikini, Enewetak and Majuro)
Marshall Stuart (Bikini)

Marshallese and Bechtel (BN) support staff for LLNL

Judy Honda (Bikini, Enewetak)
Richard Giles (Bikini, Enewetak)
Marshallese female assistant(s) (Enewetak)
Kenny Selk or alternative (Enewetak)
Four (4) Marshallese support staff for field sampling and other tasks (Bikini).
Capelle DeBrum and Marshallese support staff to help prepare the barge shipment to LLNL (Kwajalein)

In addition, Lance Yamuguchi along with staff from the BN Office in Majuro are planning on conducting a series of urine collections to coincide with the back end of this mission. Terry Hamilton will provide some follow-up training of BN staff whom he hope can continue this effort without further oversight from Honolulu or LLNL.

Tasks:

Bikini Island (26 March- 5 April 2002) (*Terry Hamilton and Marshall Stuart*).

1. Conduct the last scheduled sampling of trees from the CLC and KNPK plots before publication of results.
2. Collect samples and re-fertilize 220 & 120 kg/hectare plots in HEJ.
3. Collect coconut and tree cores from quad trees on lysimeter 10 and 11.
4. Re-sample daughter-parent trees and establish a series of new parent-daughter pairs before publication of results (at request of Bill Robison to complete an earlier study).
5. Collection soil cores from the area of lysimeter 12.
6. Process any remaining water samples from the lysimeter collections, and develop/maintain/refurbish lysimeter equipment as required.
7. Take salinity measurements of slotted wells.
8. Collect and process water samples from established wells.
9. Prepare a inventory of equipment items as required under for the LLNL Inventory Assests Program.
10. Prepare samples for shipment to LLNL (through Kwajalein Office)

Enewetak Island (5 April – 11 April 2002) (*Terry Hamilton*)

1. To review facility setup and controls to maintain adequate levels of cleanliness to collect urine samples in the Enewetak Radiological Laboratory.
2. Initiate the next round of annual urine collections to include 40 new designated individuals plus additional quality control samples to estimate inter- and intra-sampling variability. The latter will allow a direct comparison of results from year-to-year. The collection is expected to include female participants so it will be critical to identify a female assistant(s) to help with the collection.
3. BN staff will continue the collections over next 8 days, and have the samples packaged/shipped to Livermore for analysis.
4. Oversee annual maintenance cycle on the facility.

Special requirements of BN and local support staff

1. Provide advanced support for the mission by performing environmental and ES&H controls such as cleaning and sealing doors and windows, stripping and polishing of floors, cleaning/changing of filters on air conditioning units, HEPA filter units and/or the fumehoods, and other general maintenance activities to help maintain the building.
2. Take delivery and stage supplies and equipment ready for the Army 1990D flight scheduled for 5 April.
3. Take responsibility for the packaging and shipment of urine samples to LLNL.

Majuro (11-15 April 2002) (*Terry Hamilton*)

1. To review program requirements and environmental controls to continue urine collections out of Majuro for the Rongelap PII workers.
2. Oversee and train BN staff on standard protocols for the stabilization and handling/packaging of urine samples for shipment to LLNL.

Schedule

LLNL and Honolulu based BN support personnel will depart Honolulu morning of 22 March for Kwajalein. The LCU (Great Bridge) along with mission personnel and supplies will depart Kwajalein on morning of 25 March (local time) and arrive Bikini 26 March. The LCU will return to Bikini on April 5 to transport samples and personnel (Marshall Stuart and Marshallese workers) back to Kwajalein. Marshall Stuart will leave Kwajalein on 8 April and return to LLNL. Terry Hamilton and assigned BN personnel will take a 1900D charter flight to Enewetak on April 5. Terry Hamilton will depart on AMI on 11 April traveling onto

Majuro before returning to LLNL on 15 April. BN staff will remain on Enewetak and complete the annual round of urine collections for FY2002.

Terry Hamilton and Marshall Stuart

Thursday March 21	Livermore/SFO to Honolulu
Friday March 22	Honolulu to Kwajalein
Monday March 25	Depart Kwajalein on LCU, arrive Bikini March 26.
Friday April 5	Depart Bikini on LCU to Kwajalein, arriving Saturday April 6 (<i>Stuart</i>).
Friday April 5	Depart 1990D from Bikini to Enewetak (<i>Hamilton</i>).
Monday April 8	Depart Kwajalein bound for Honolulu/ SFO (<i>Stuart</i>).
Thursday April 11	Depart Enewetak and arrive Majuro on AMI (<i>Hamilton</i>)
Monday April 15	Depart Majuro bound for Honolulu/SFO (<i>Hamilton</i>).

Vehicles

No special requirements

Lodging

Hawaii-Outgoing

Terry Hamilton - March 21 (Hilton)
Marshall Stuart - March 21 (Hoborn)

Kwajalein

Terry Hamilton, Marshall Stuart - March 23 and 24 (Kwaj. Lodge)
Marshall Stuart - April 6 and 7 (Kwaj. Lodge)

Majuro

Terry Hamilton - April 11, 12, 13, 14 (OutRigger)

Hawaii-return

Terry Hamilton - arrival 0300 April 15 (Hilton)
Marshall Stuart - arrival 0300 April 8 (Airport Hotel)

Special Requirements:

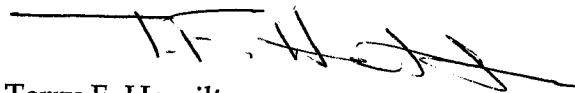
Bikini (with LCU support)

1. One walk-in freezer van for storage/transport of samples.
2. 4 × 4 trucks for the field sampling crew.
3. Sample Sky Track for collecting coconuts
4. Portable generator for well sampling.
5. Provisions for accommodating LLNL, BN and Marshallese workers.

Enewetak (charter 1900D)

1. Provisions for accommodating LLNL, BN and Marshallese workers.
2. Supply of coolers and packaging materials for shipment of up to a 50-person urine collection.
3. Provisions to perform an annual maintenance cycle within the Enewetak Radiological Laboratory to include cleaning/servicing equipment and supplies. Recommend that the entire floor inside the building be stripped and repolished.

Sincerely,



Terry F. Hamilton

cc. Bill Jackson, DOE PASO
Judy Honda, Bechtel

Lance Yamaguchi, Bechtel
Marshall Stuart, LLNL